Unattended Ground Imaging Sensor System – UGI-C
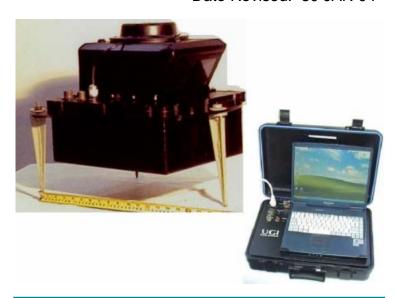
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VENDOR DESCRIPTION

The UGI-C is a covert, man portable system, consisting of a Field Unit and a Base Station. The Field Unit contains the PIR sensor, all-weather IR (thermal) camera and RF communication link. It is rugged and sealed (nitrogen purged). The Base Station consists of a rugged laptop computer and communication software and hardware. It all fits into a rugged Pelican case. Upon intrusion detection, images captured are sent via non-line-of-site RF communication link to the Base Station and are shown as a short movie within 3.5 seconds. Other modes of communication (VHF, HF, Cellular, Satellite) are available. The system weighs only 9 kilograms (batteries included) and measures 10" x 9.6" x 11". The Field Unit contains an additional connector for external sensor use (magnetic, seismic, acoustic, etc.).

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Business Category: Small Business

UGS

Power Source		Environmental	
Sensors	5 SAFT 5791 lithium batteries 30 days @ 16 activations/day @ -10°C 45 days @ 12 activations/day @ +20°C	High Temp	+60°C Low Temp -10°C
		Altitude	10000 ft (Operating) 33000 ft (Transit)
		Humidity	Sealed – nitrogen purged MIL-STD-810D
Supplemental Battery Box	10 SAFT 5791 lithium batteries Additional 250 days mission life	Immersion	Sealed – nitrogen purged MIL-STD-810D
		Sand/Dust	MIL-STD-810D
Monitor	N/A	Salt	MIL-STD-810D, Method 509.2
		Fungus	N/A
Repeater	N/A	Shock/Vibe	Random vibration, drop test & loose cargo test/MIL-STD-810D
		EMI/EMC	Complies w/MIL-STD-461A, Level CE06, RE02, RE02.1, RS03

Sensor	Description	Detection	Size/Weight	Features
Passive Infrared	Detects temp. differential between target and background. Provides direction and target count.	Tracked Vehicle 50-300m Wheeled Vehicle 50-300m Personnel 10-150m	10" x 9.6" x 11" Weight: 9 kg (with batteries)	■ Passive detection ■ Image Verification ■ Covert operation ■ Low false alarm rate ■ Quiescent until activated by targets ■ Operates on COTS batteries ■ Low power DSP

Device	Description	Message Type	Size/Weight	Features
Monitor	Provides the capability to display sensor transmissions. Can be used to relay sensor data to an external digital display via built-in RS-232 port.	19200-bit/sec	Standard or Rugged Laptop 1-3.5 kg	■ UHF (Optional) 403-419/450-470/496-512MHz ■ One (1) channel ■ LPI/LPD ultra-short burst transmissions ■ 2, 5, 40-watt transmitters 30km range ■ Optional Cellular & Satellite communication